

FIG. 1

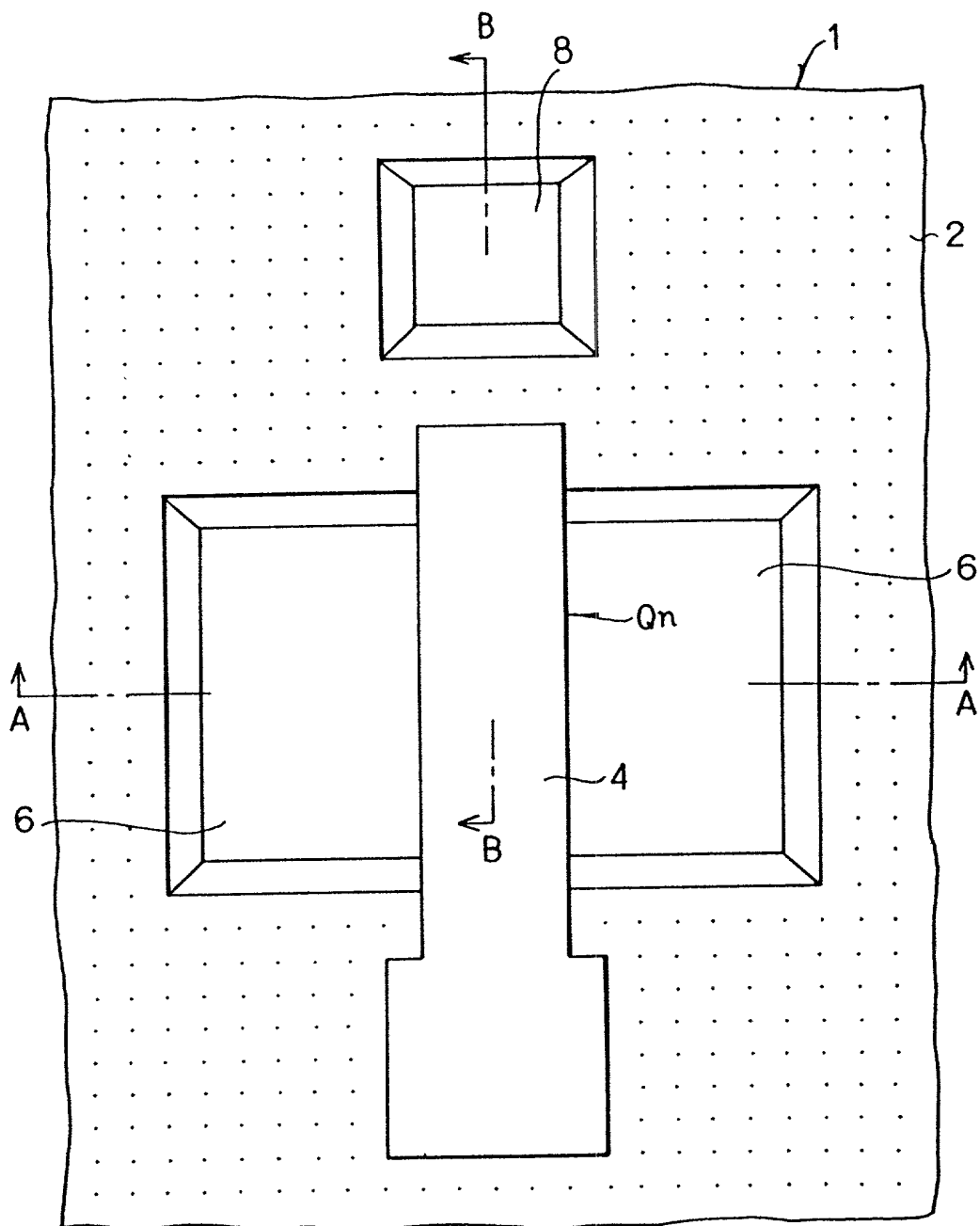


FIG. 2

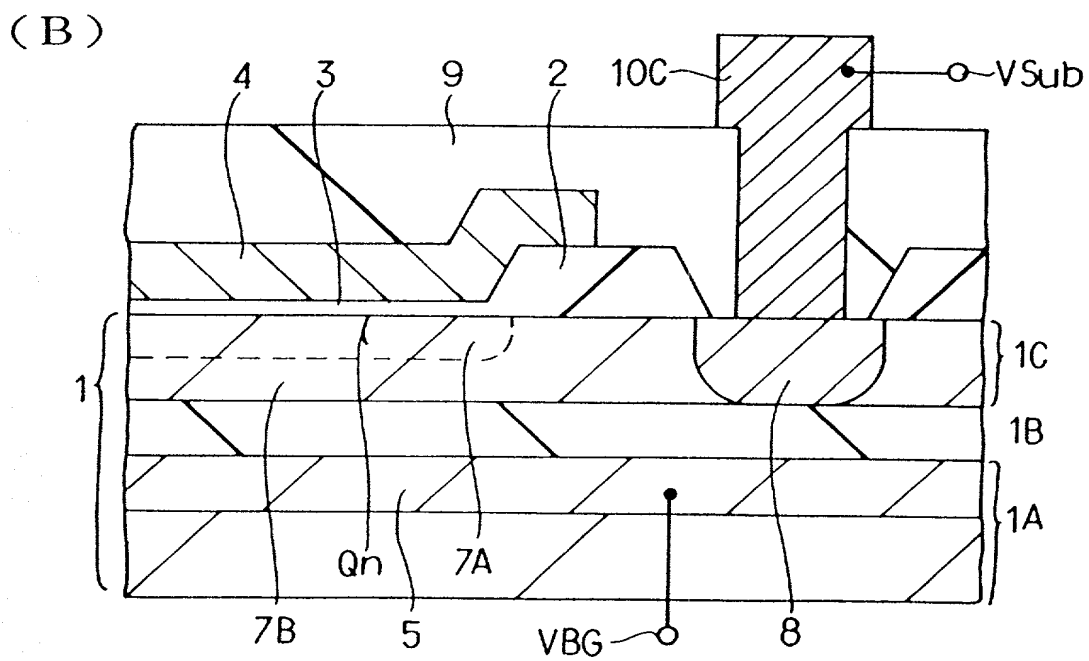
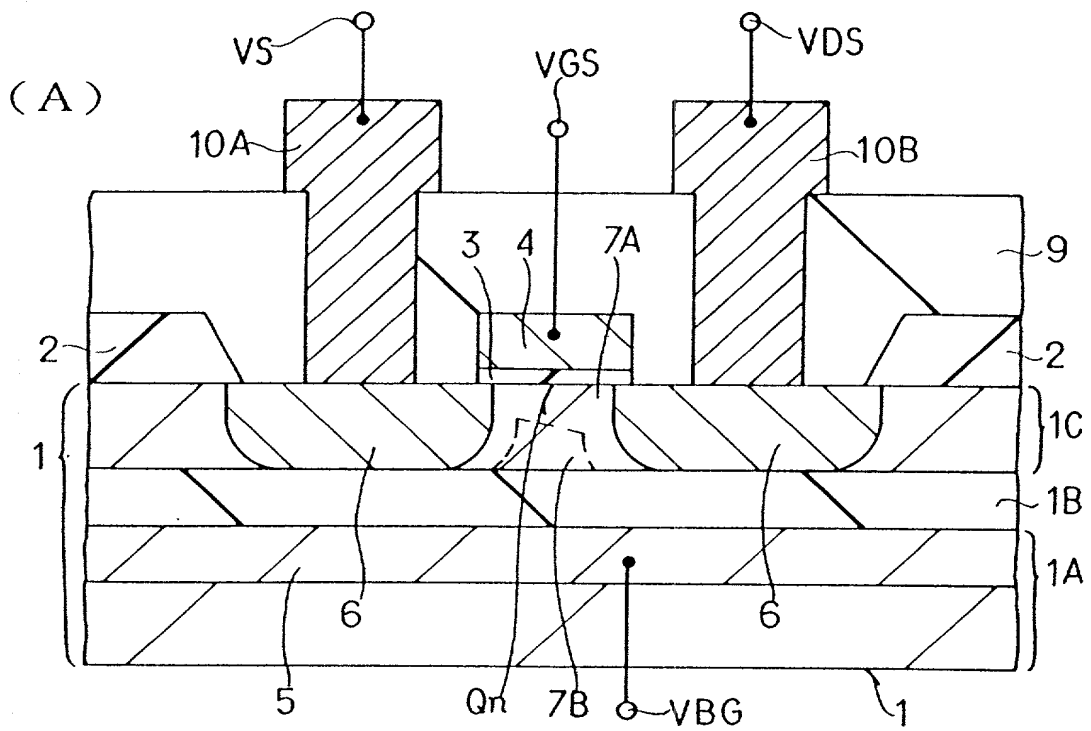


FIG. 3

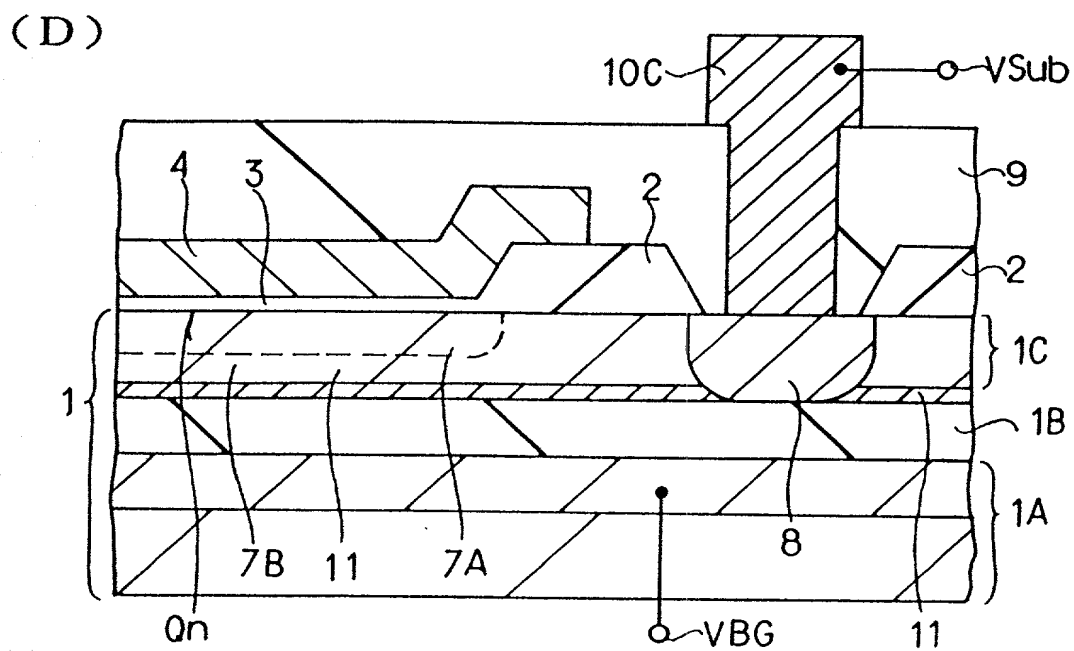
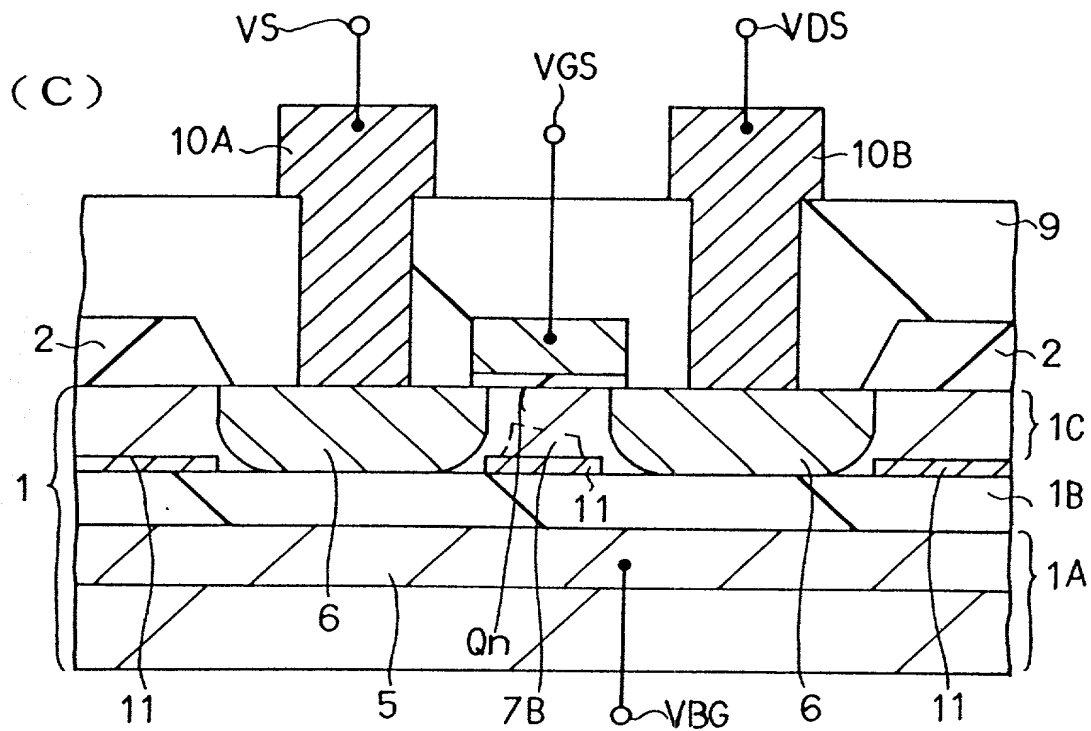


FIG. 4

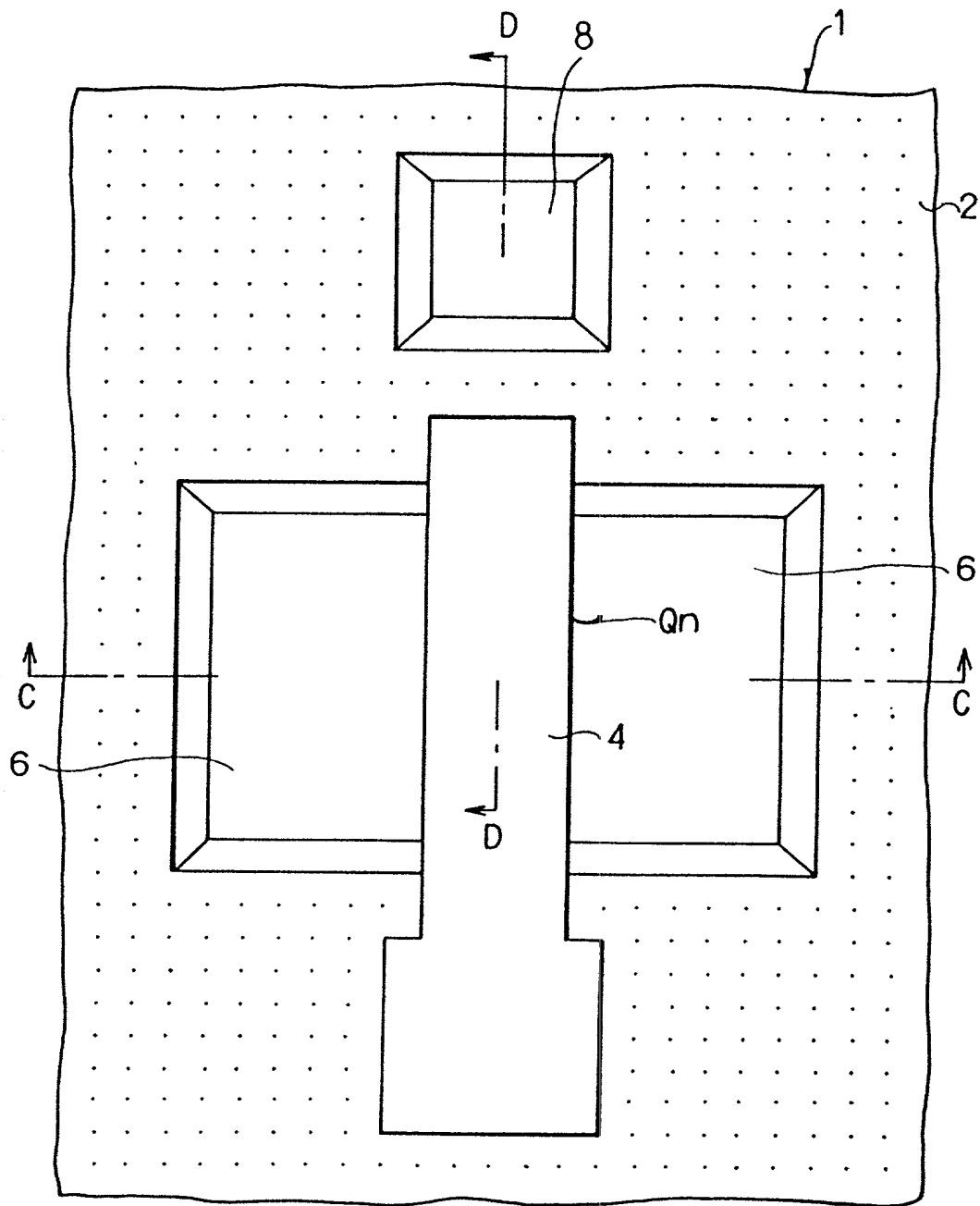


FIG. 5

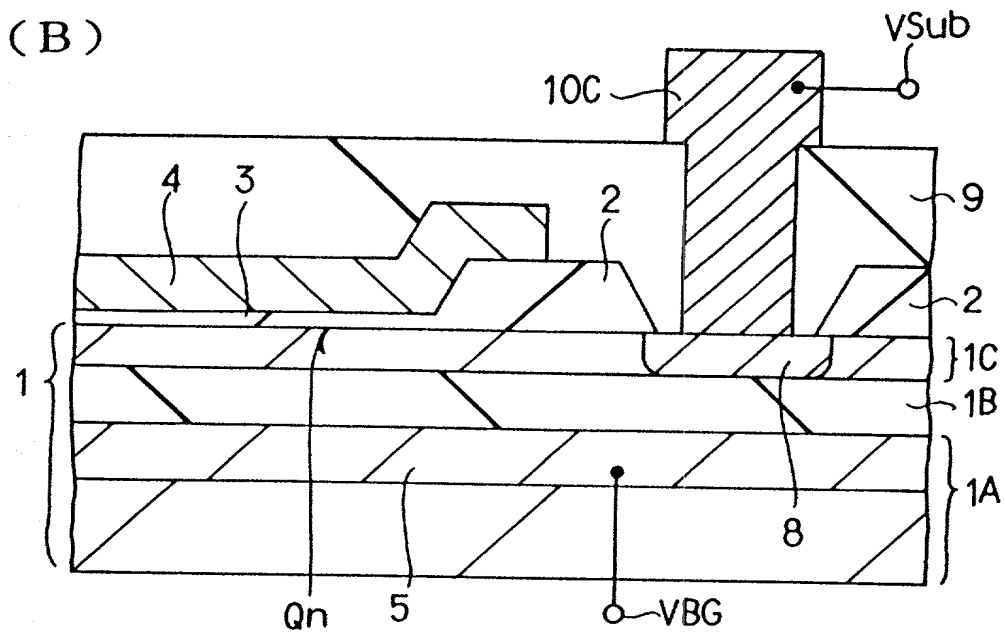
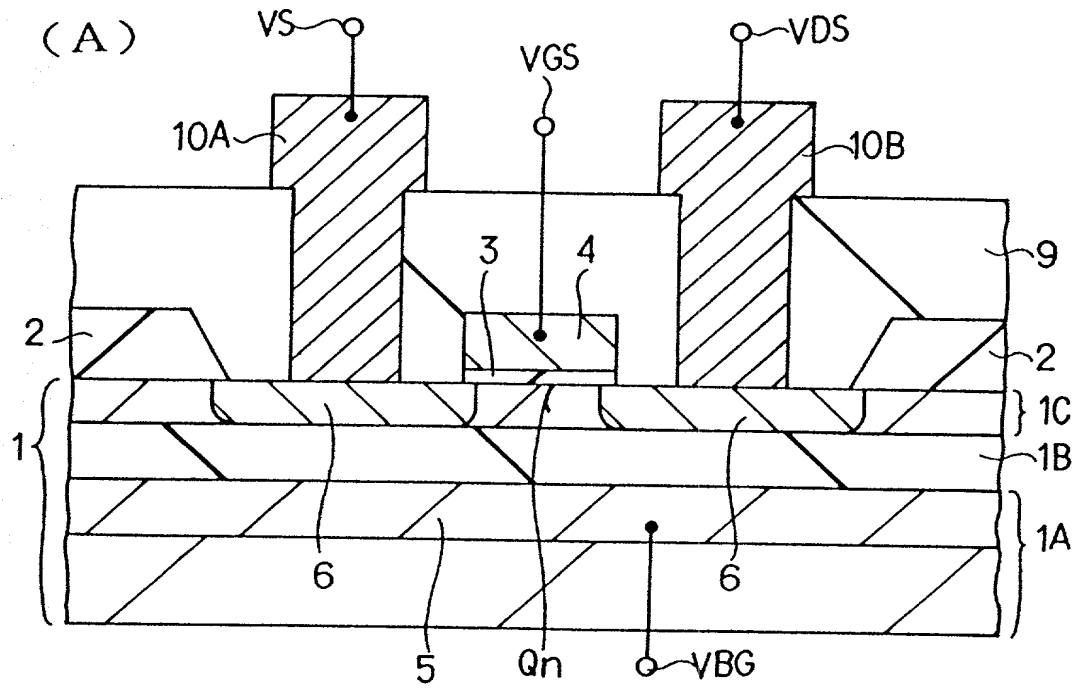


FIG. 6

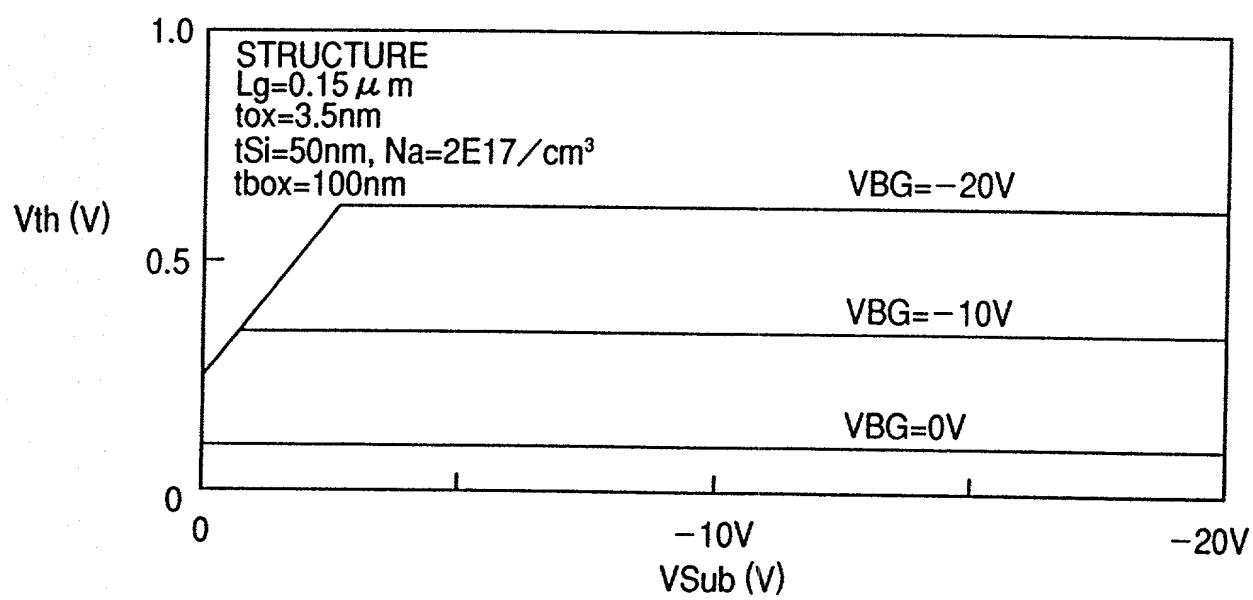


FIG. 7

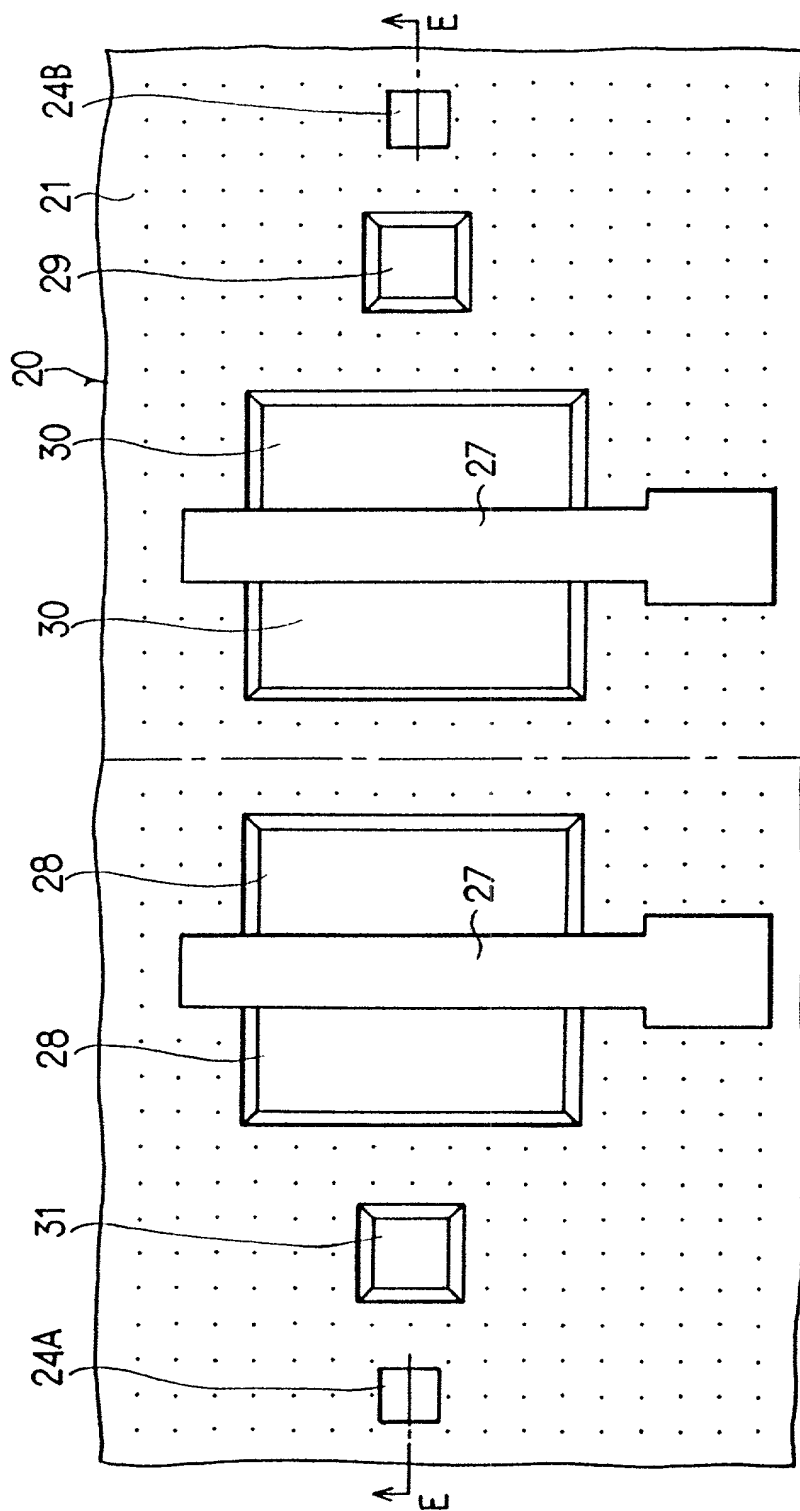


FIG. 8

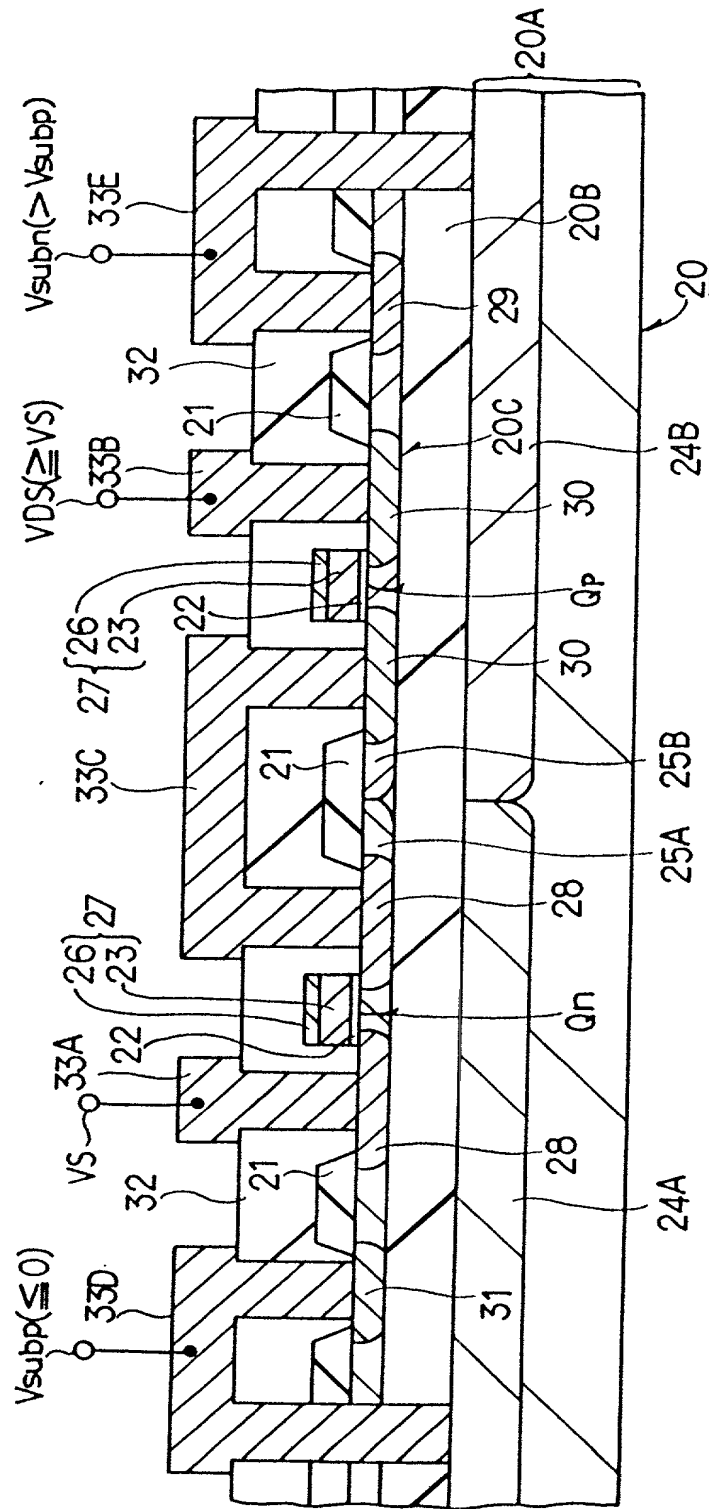




FIG. 9

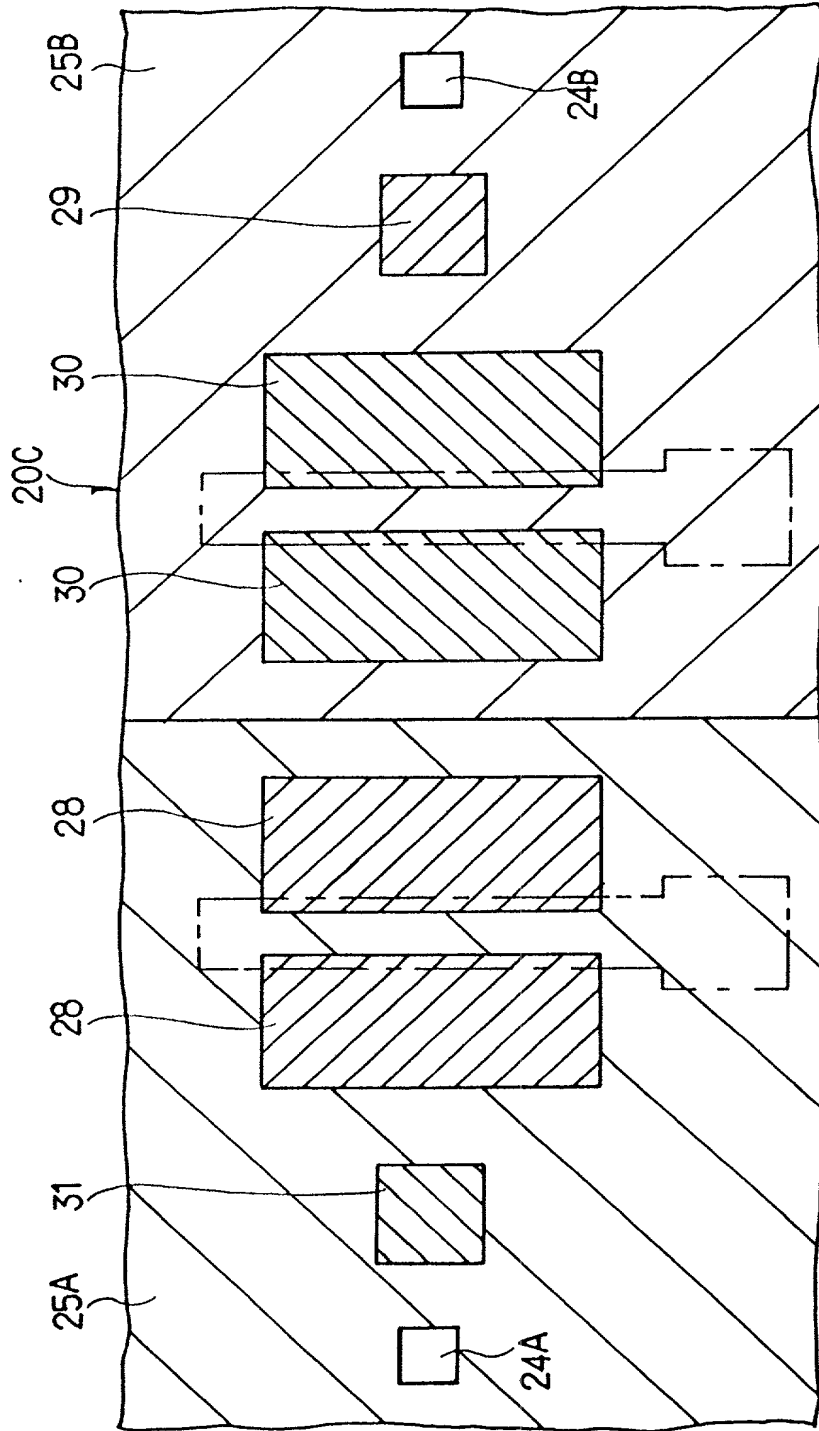
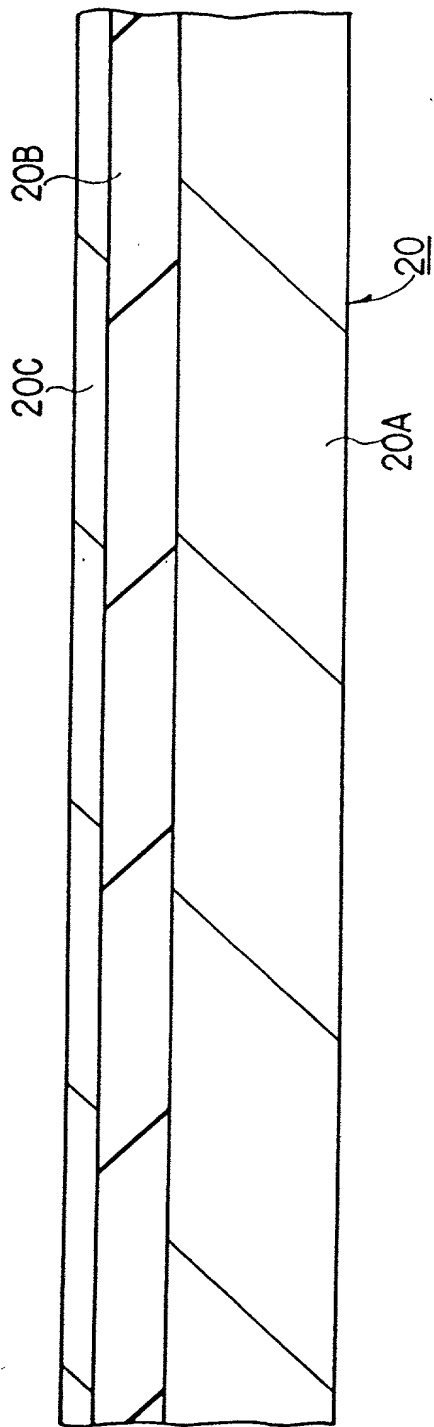


FIG. 10

(A)



(B)

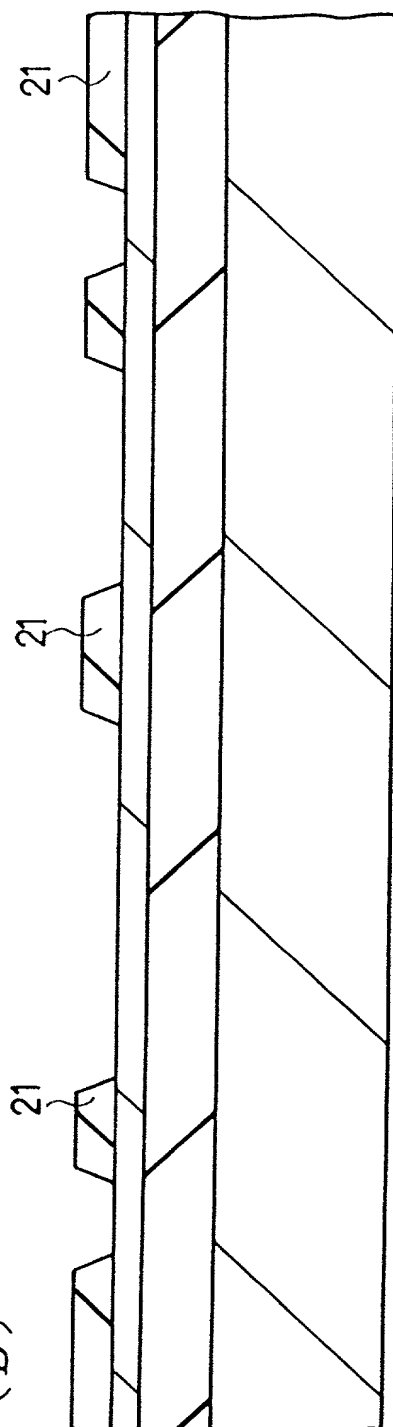
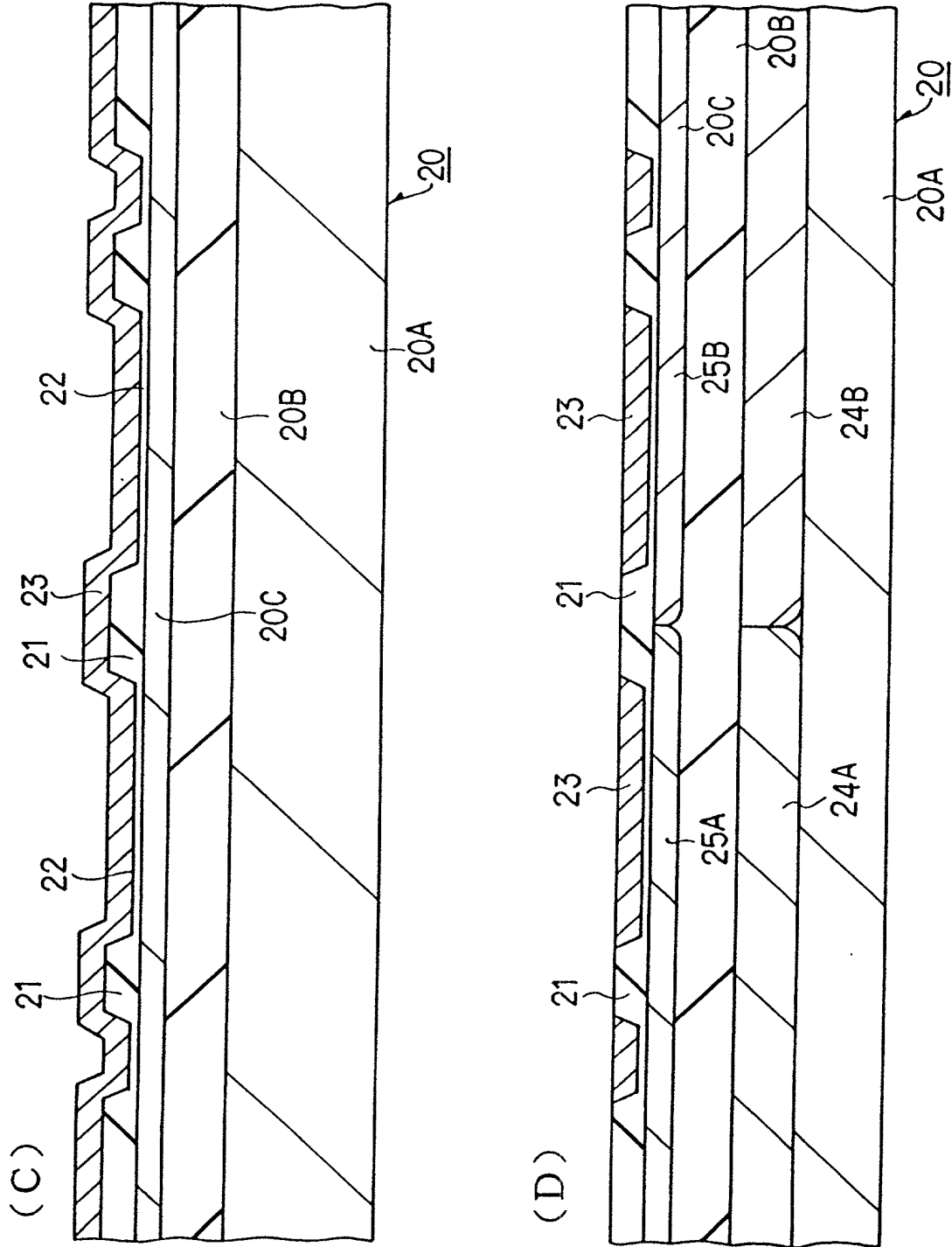


FIG. 11



NAME	AGE	SEX	RELATION	DATE	TIME	PLACE	REMARKS
John Smith	25	M	Head	1880	10	St. Paul	Went to school
Mary Smith	22	F	Wife	1880	10	St. Paul	Went to school
James Smith	18	M	Son	1880	10	St. Paul	Went to school
Elizabeth Smith	15	F	Daughter	1880	10	St. Paul	Went to school
William Smith	12	M	Son	1880	10	St. Paul	Went to school
Anna Smith	10	F	Daughter	1880	10	St. Paul	Went to school
Thomas Smith	8	M	Son	1880	10	St. Paul	Went to school
Sarah Smith	6	F	Daughter	1880	10	St. Paul	Went to school
Charles Smith	4	M	Son	1880	10	St. Paul	Went to school
Elizabeth Smith	2	F	Daughter	1880	10	St. Paul	Went to school

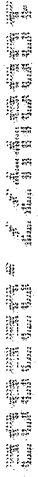


FIG. 13

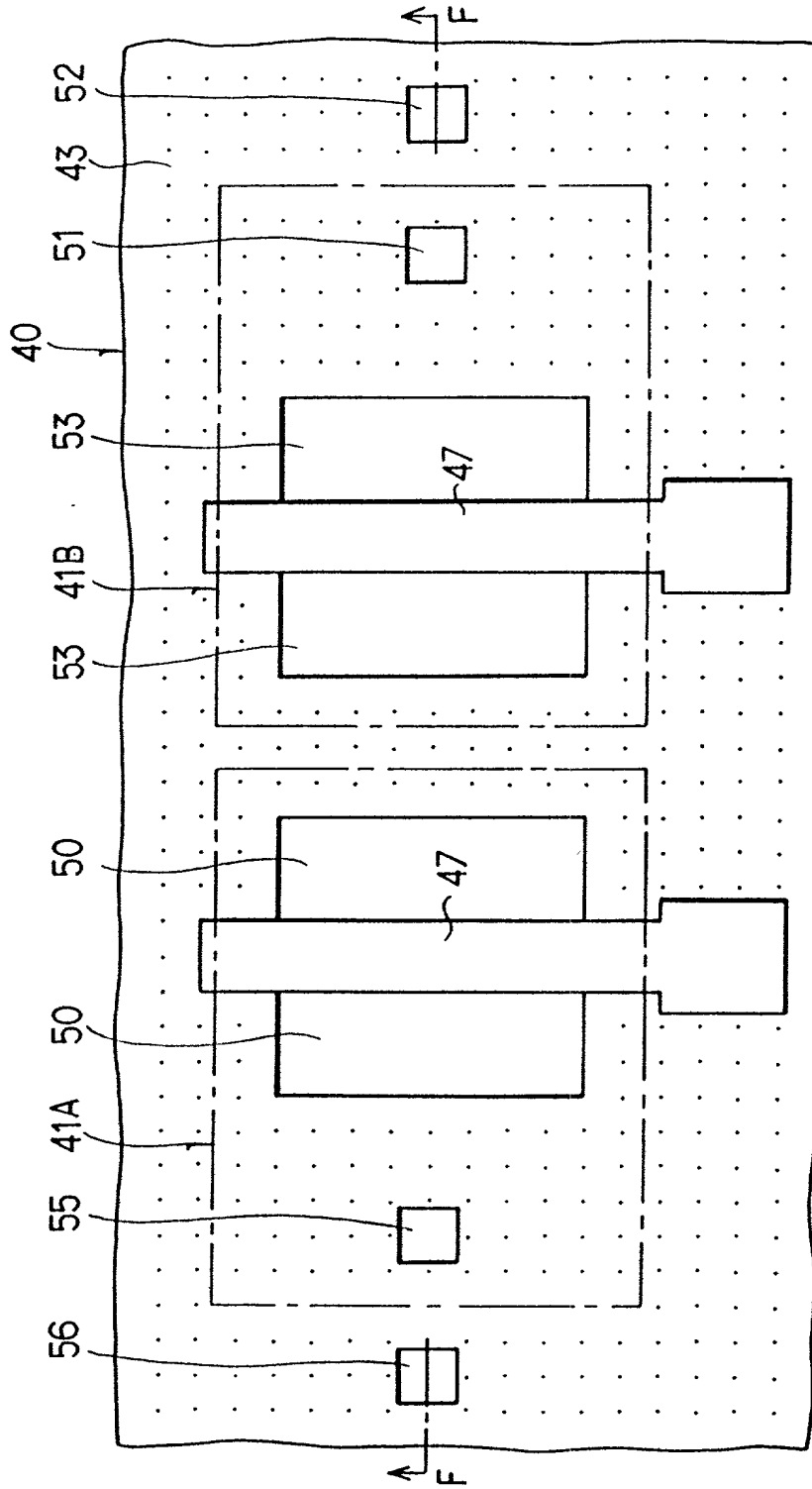


FIG. 14

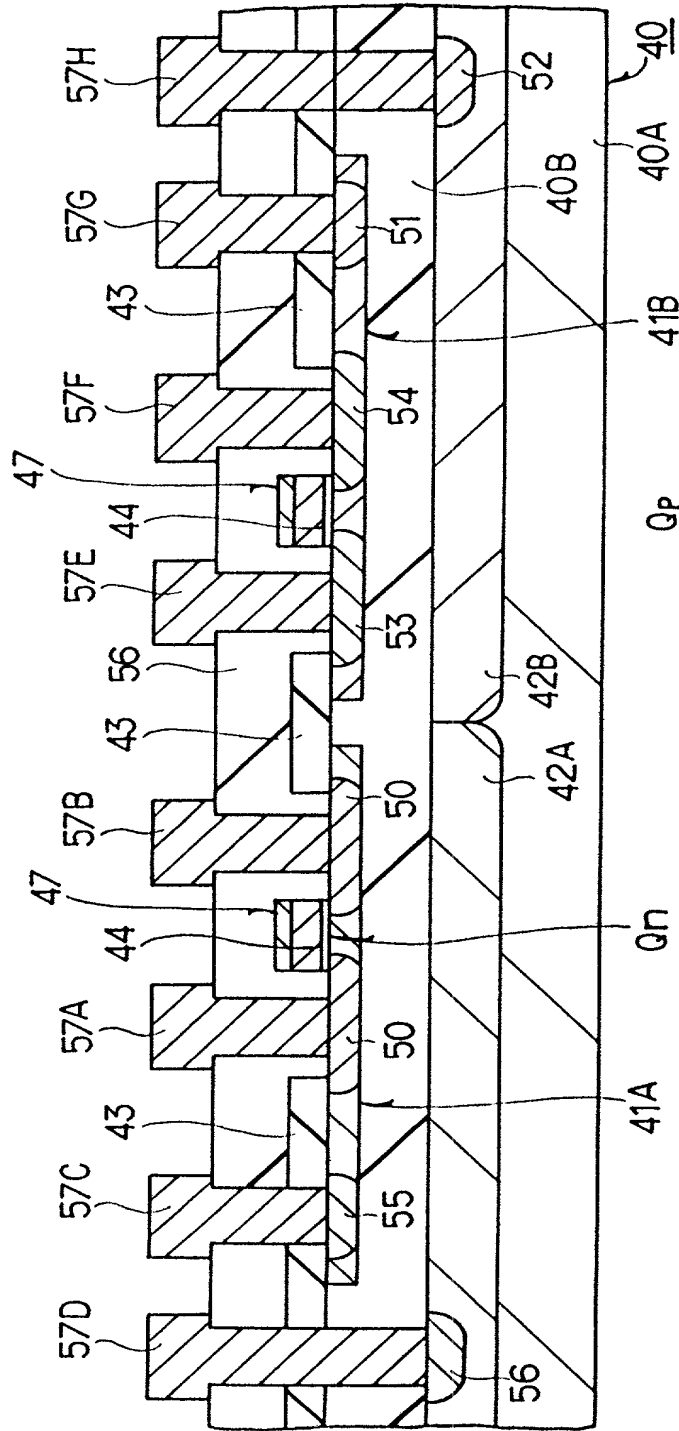


FIG. 15

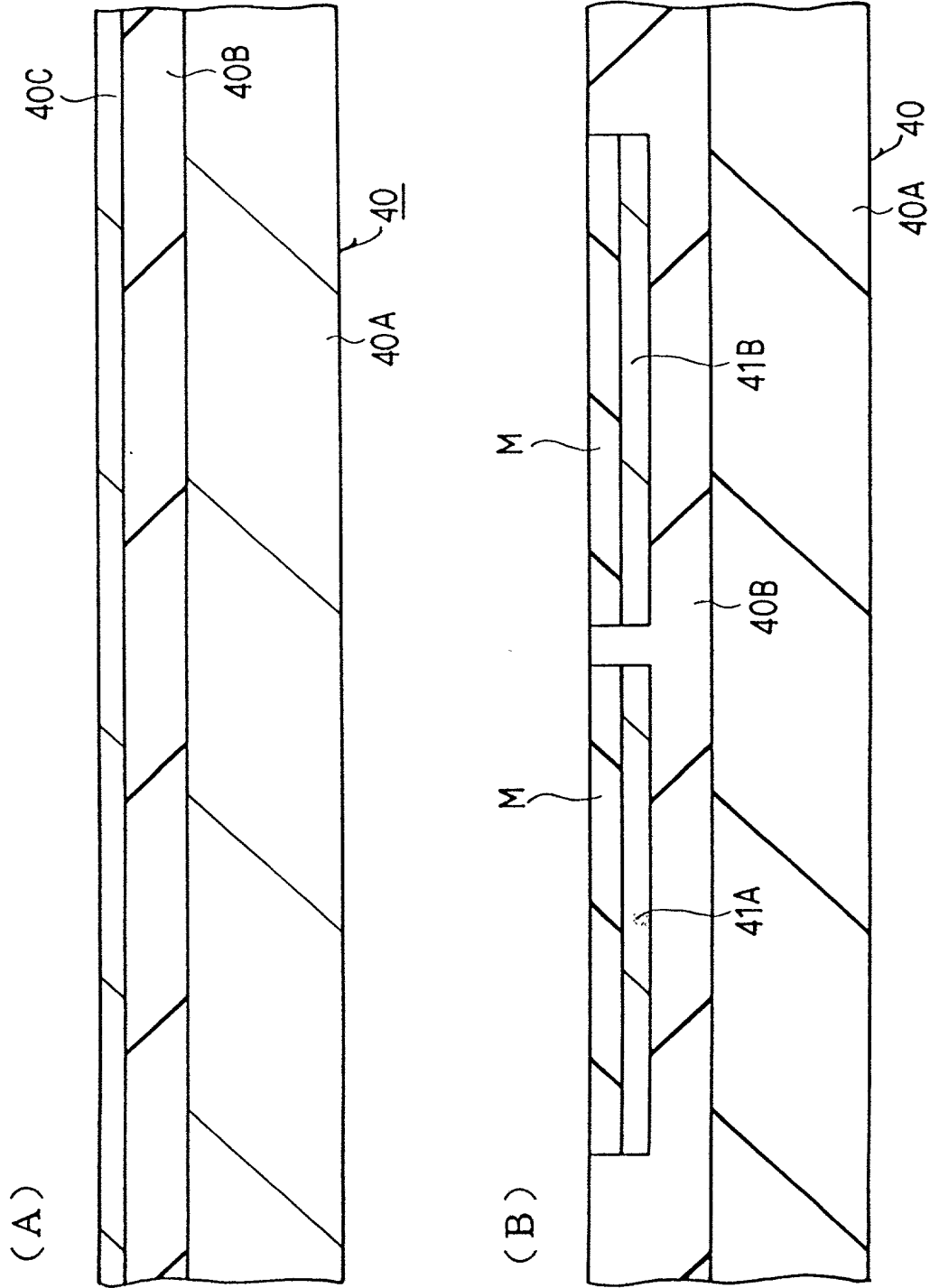
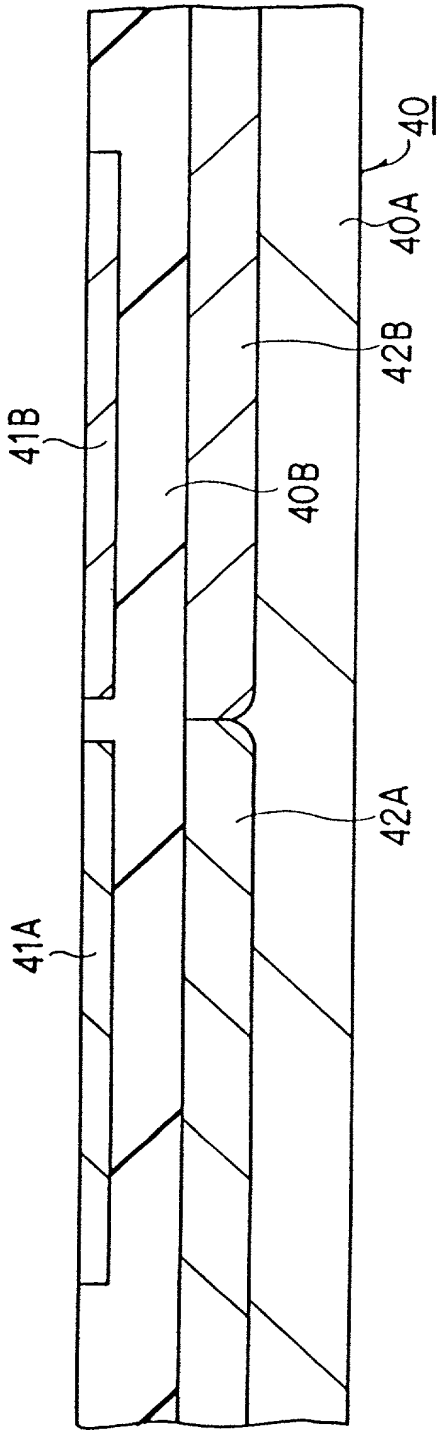


FIG. 16

(C)



(D)

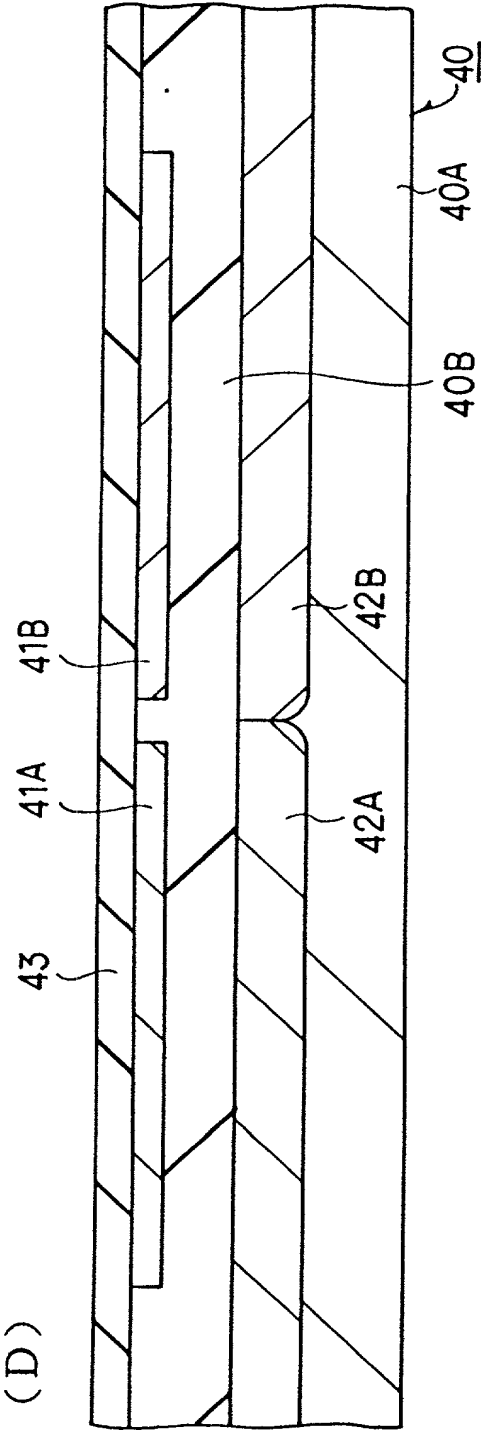




FIG. 17

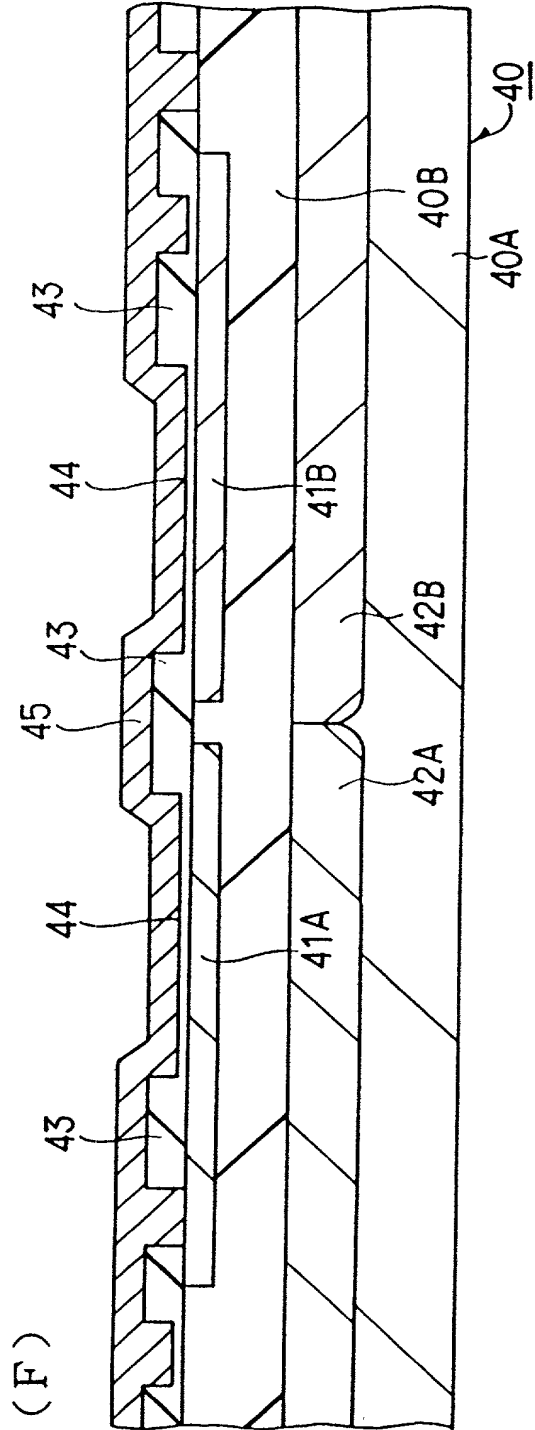
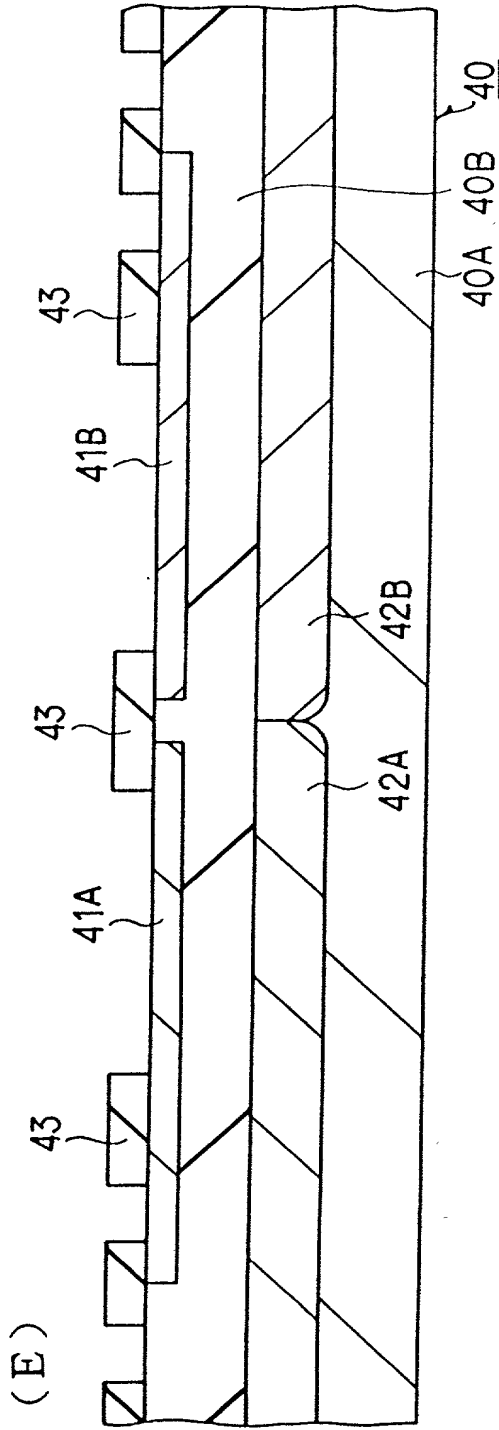


FIG. 18

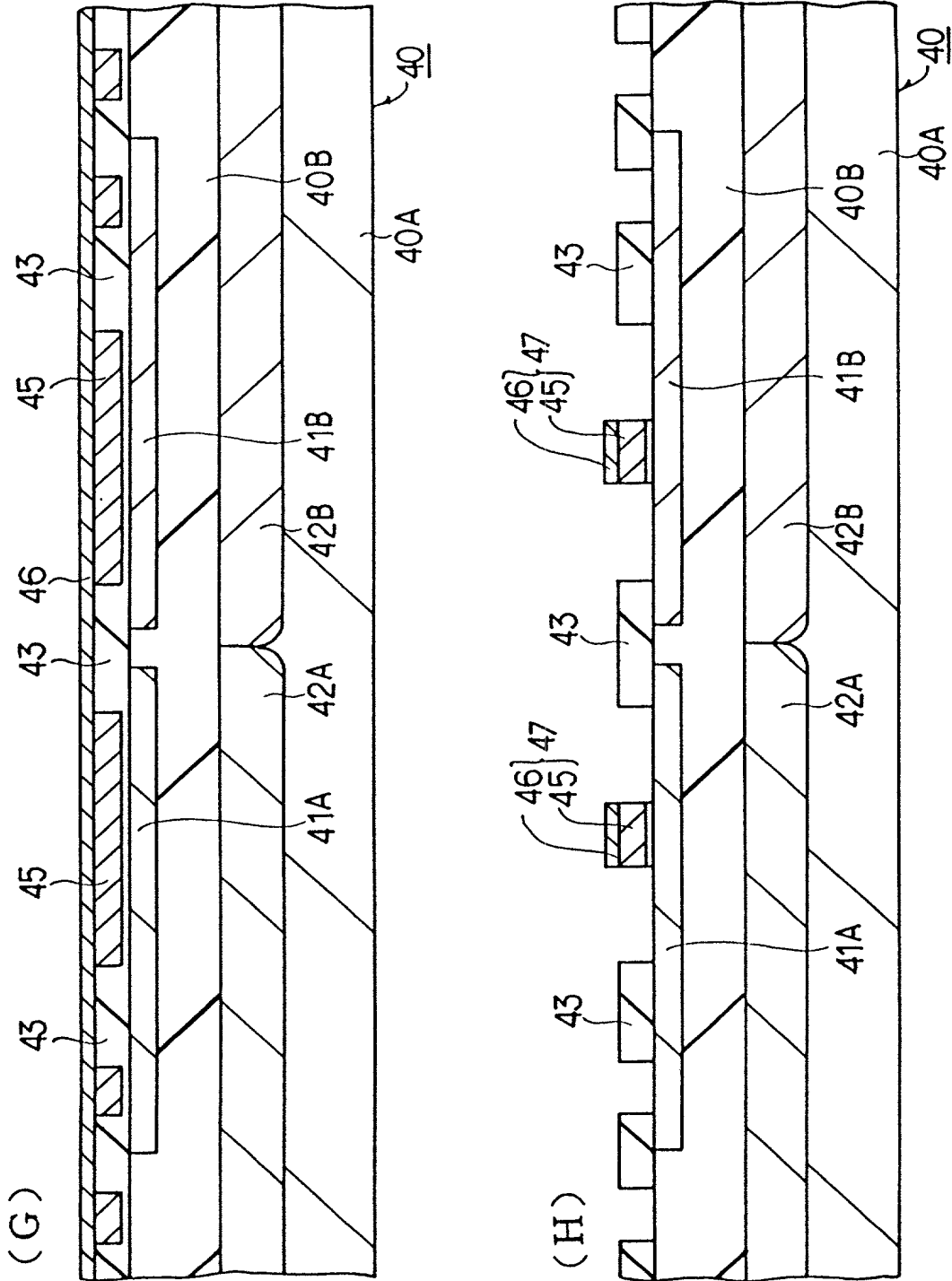


FIG. 19

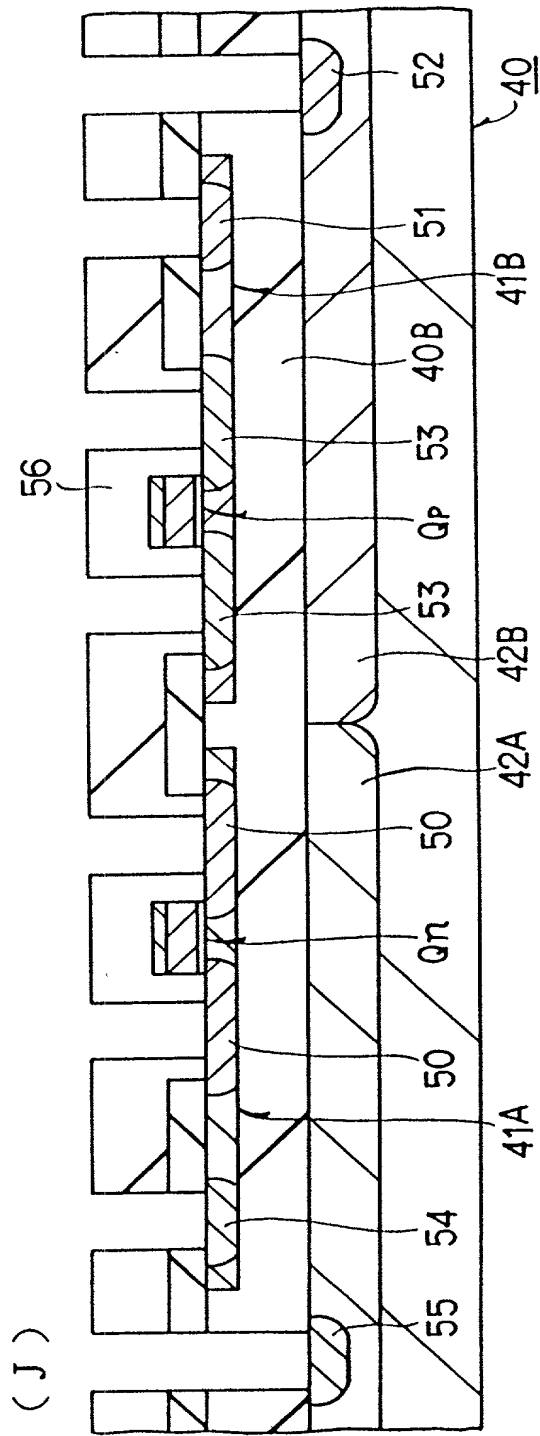
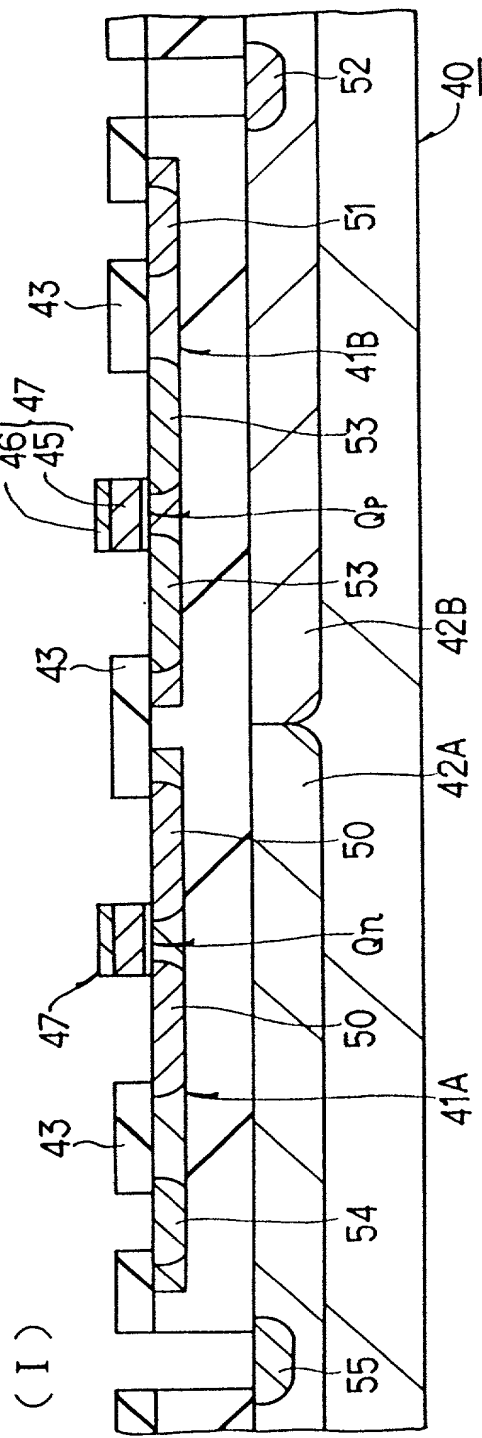


FIG. 20

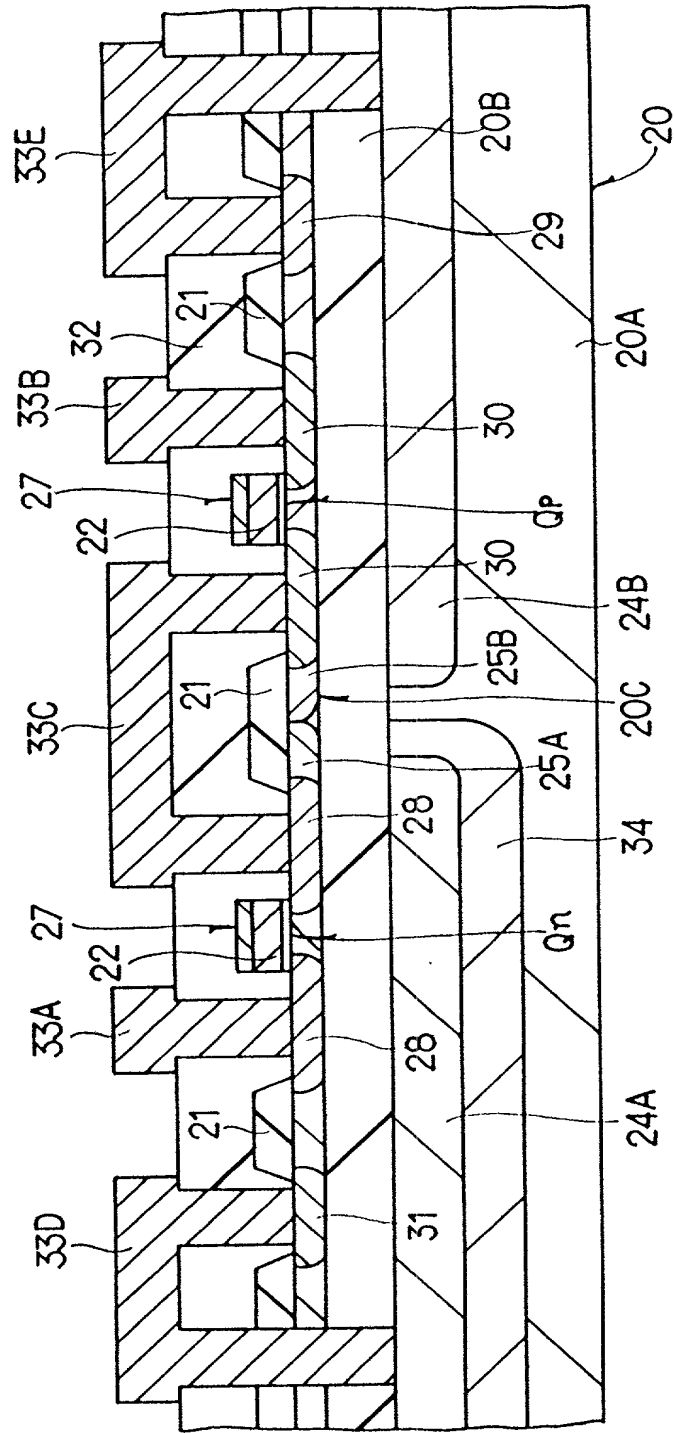
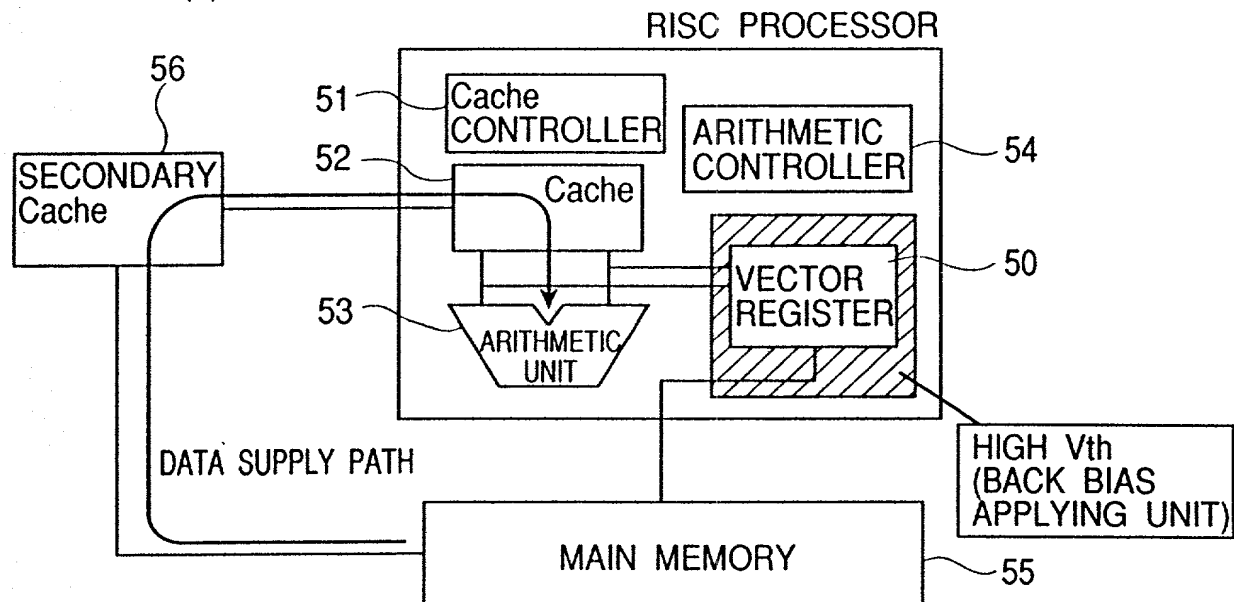


FIG. 21

## (1) NORMAL OPERATION MODE



## (2) MASS DATA NUMERICAL CALCULATION MODE (VECTOR COMPUTE MODE)

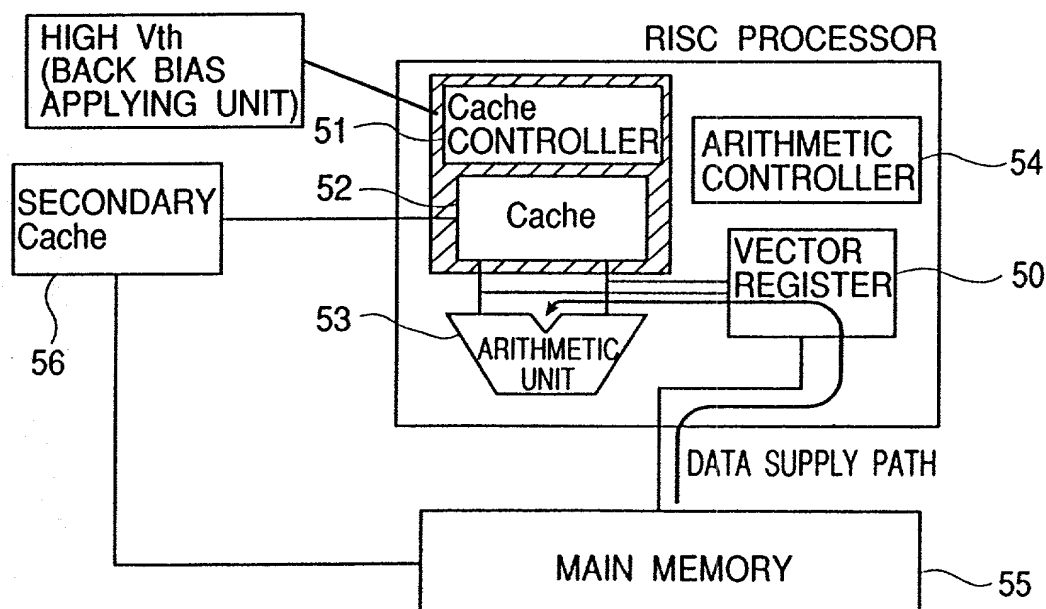


FIG. 22

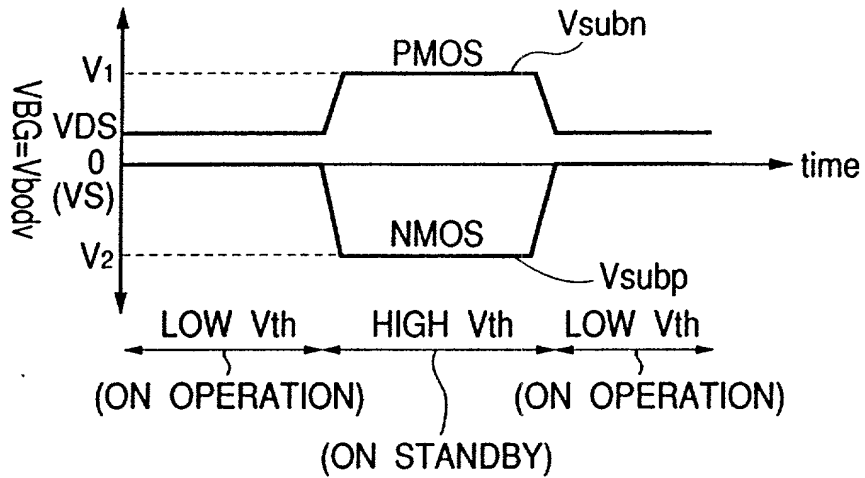
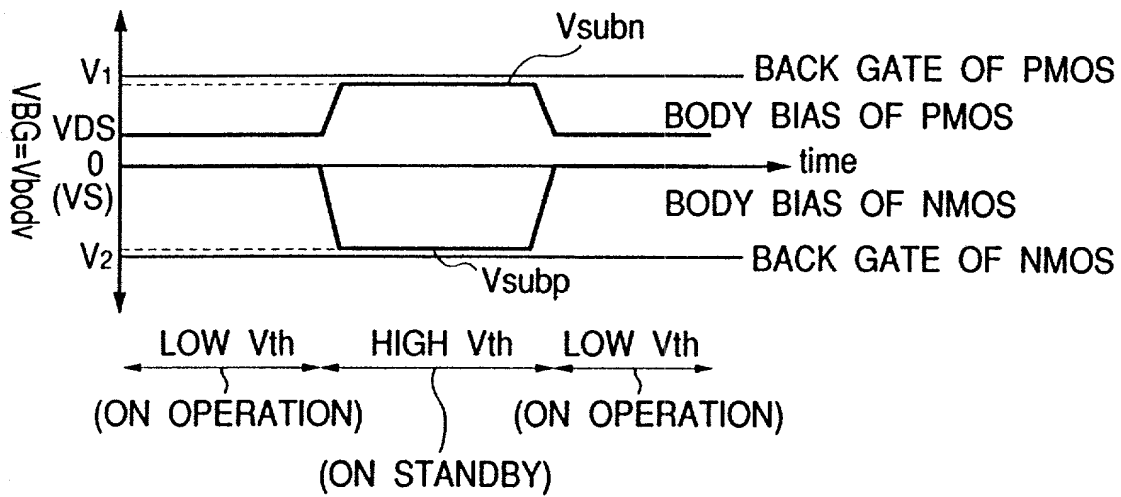


FIG. 23



UNITED STATES PATENT AND TRADEMARK OFFICE  
DOCUMENT CLASSIFICATION BARCODE SHEET



**Oath/Declaration, Small Entity,  
and Power of Attorney**

8

## Declaration and Power of Attorney For Patent Application

## 特許出願宣言書及び委任状

## Japanese Language Declaration

## 日本語宣言書

下記の氏名の発明者として、私は以下の通り宣言します。

As a below named inventor, I hereby declare that:

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明に関して請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

A SEMICONDUCTOR DEVICE

上記発明の明細書（下記の欄で×印がついていない場合は、本書に添付）は、

The specification of which is attached hereto unless the following box is checked:

☐ \_\_月\_\_日に提出され、米国出願番号または特許協定条約国際出願番号を\_\_\_\_とし、  
(該当する場合) \_\_\_\_\_に訂正されました。

☒ was filed on 22/September/1998  
as United States Application Number or  
PCT International Application Number  
PCT/JP98/04256 and was amended on  
\_\_\_\_\_ (if applicable).

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.



# Japanese Language Declaration (日本語宣言書)

私は、米国法典第35編119条(a)-(d)項又は365条(b)項に基づき下記の、米国外の国の少なくとも一カ国を指定している特許協力条約365(a)項に基づき国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している、本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示している。

## Prior Foreign Application(s)

外国での先行出願

9-320973	Japan
(Number)	(Country)
(番号)	(国名)
(Number)	(Country)
(番号)	(国名)

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed  
優先権主張なし

21/November/1997	<input type="checkbox"/>
(Day/Month/Year Filed)	
(出願年月日)	
(Day/Month/Year Filed)	<input type="checkbox"/>
(出願年月日)	

私は、第35編米国法典119条(e)項に基づいて下記の米国特許出願規定に記載された権利をここに主張いたします。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

(Application No.)	(Filing Date)
(出願番号)	(出願日)

(Application No.)	(Filing Date)
(出願番号)	(出願日)

私は、下記の米国法典第35編120条に基づいて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)に基づき権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願書提出日以降で本出願書の日本国内または特許協力条約国際提出日までの期間中に入手された、連邦規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of application.

(Application No.)	(Filing Date)
(出願番号)	(出願日)

(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、係属中、放棄済)

(Application No.)	(Filing Date)
(出願番号)	(出願日)

(Status: Patented, Pending, Abandoned)
(現況: 特許許可済、係属中、放棄済)

私は、私自身の知識に基づいて本宣言書で私が行なう表明が真実であり、かつ私の入手した情報と私の信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行えば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごとく宣誓を致します。

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

# Japanese Language Declaration (日本語宣言書)

委任状： 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。(弁理士、または代理人の氏名及び登録番号を明記のこと)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

Donald R. Antonelli, Reg. No. 20,296; David T. Terry, Reg. No. 20,178; Melvin Kraus, Reg. No. 22,466; Stanley A. Wal, Reg. No. 26,432; William I. Solomon, Reg. No. 28,565; Gregory E. Montone, Reg. No. 28,141; Ronald J. Shore, Reg. No. 28,577; Donald E. Stout, Reg. No. 26,422; Alan E. Schiavelli, Reg. No. 32,087; James N. Dresser, Reg. No. 22,973 and Carl I. Brundidge, Reg. No. 29,621

## 書類送付先

Send Correspondence to:

Antonelli, Terry, Stout & Kraus  
Suite 1800  
1300 North Seventeenth Street  
Arlington, Virginia 22209

## 直接電話連絡先：(氏名及び電話番号)

Direct Telephone Calls to: (name and telephone number)

Telephone: (703) 312-6600  
Fax: (703) 312-6666

唯一または第一発明者	Full name of sole or first inventor Shinichiro MITANI	
発明者の署名	日付	Inventor's signature Date <i>Shinichiro Mitani</i> 2/ March / 2000
住所	Residence Tokorozawa, Japan	
国籍	Citizenship Japan	
私書箱	Post Office Address c/o Hitachi, Ltd., Intellectual Property Group New Marunouchi Bldg. 5-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8220, Japan	

(第二以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for second and subsequent joint inventors.)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

第二共同発明者	Full name of second joint inventor, if any	
第二共同発明者の署名	Takahide IKEDA	
日付	Second inventor's signature	Date
	<i>Takahide Ikeda</i>	<i>4/March/2000</i>
住所	Residence	
	Tokorozawa, Japan	
国籍	Citizenship	
	Japan	
私書箱	Post Office Address	
	c/o Hitachi, Ltd., Intellectual Property Group	
	New Marunouchi Bldg. 5-1, Marunouchi 1-chome,	
	Chiyoda-ku, Tokyo 100-8220, Japan	
第三共同発明者	Full name of third joint inventor, if any	
第三共同発明者の署名	Kazutaka MORI	
日付	Third inventor's signature	Date
	<i>Kazutaka Mori</i>	<i>2/March/2000</i>
住所	Residence	
	Kodaira, Japan	
国籍	Citizenship	
	Japan	
私書箱	Post Office Address	
	c/o Hitachi, Ltd., Intellectual Property Group	
	New Marunouchi Bldg. 5-1, Marunouchi 1-chome,	
	Chiyoda-ku, Tokyo 100-8220, Japan	
第四共同発明者	Full name of fourth joint inventor, if any	
第四共同発明者の署名	Hisayuki HIGUCHI	
日付	Fourth inventor's signature	Date
	<i>Hisayuki Higuchi</i>	<i>16/March/2000</i>
住所	Residence	
	Kokubunji, Japan	
国籍	Citizenship	
	Japan	
私書箱	Post Office Address	
	c/o Hitachi, Ltd., Intellectual Property Group	
	New Marunouchi Bldg. 5-1, Marunouchi 1-chome,	
	Chiyoda-ku, Tokyo 100-8220, Japan	
第五共同発明者	Full name of fifth joint inventor, if any	
第五共同発明者の署名		
日付	Fifth inventor's signature	Date
住所	Residence	
国籍	Citizenship	
私書箱	Post Office Address	

(第六以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for sixth and subsequent joint inventors.)